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# 100 COMPANIES

COMPANIES RECEIVING THE LARGEST DOLLAR VOLUME  
OF ~~REVENUE~~ PRIME CONTRACT AWARDS

FISCAL YEAR 1978

DEPARTMENT OF DEFENSE  
WASHINGTON HEADQUARTERS SERVICES  
DIRECTORATE FOR INFORMATION  
OPERATIONS AND REPORTS

100 LARGEST DEFENSE CONTRACTORS  
AND THEIR SUBSIDIARY CORPORATIONS  
FISCAL YEAR 1978

FOREWORD

This report presents summary data on Department of Defense military prime contracts awarded to the leading 100 companies and their subsidiary corporations during fiscal year 1978.

The data include debit and credit procurement actions over \$10,000, worldwide, under military supply, service, and construction contracts. Procurement actions include definitive contracts, the obligated portions of letter contracts, job orders, task orders, delivery orders, and any other orders against existing contracts. The data do not include that part of indefinite quantity contracts that have not been translated into specific orders on business firms, nor do they include purchase commitments on pending cancellations that have not yet become mutually binding agreements between the government and the company. The company totals do not include contracts made by other U.S. Government agencies and financed with Department of Defense funds, or contracts awarded in foreign nations through their respective governments.

The assignment of subsidiaries to parent companies is based on stock ownership of 50 percent or more by the parent company, as indicated by data published in standard industrial reference sources.

The company names and corporate structures are those in effect as of September 30, 1978 and for purposes of this report company names have been retained unless specific knowledge was available that a company has been merged into the parent or absorbed as a division with loss of company identity. Only those subsidiaries are shown for which procurement actions have been reported.

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100 COMPANIES AND THEIR SUBSIDIARY CORPORATIONS  
LISTED ACCORDING TO NET VALUE OF MILITARY  
PRIME CONTRACT AWARDS

FISCAL YEAR 1978

Department of Defense military prime contract awards over \$10,000 for research and development, services, construction, and supplies and equipment awarded during fiscal year 1978 totaled \$59.6 billion, \$9.2 billion more than in fiscal year 1977. Large awards for aircraft, missile and space systems, electronics and communications, and ships, which are dominated by large contractors, resulted in \$40.8 billion or 68.5 percent of total procurement being awarded to these 100 companies which, together with their subsidiaries, received the largest dollar volume of prime contracts over \$10,000. In fiscal year 1977, the top 100 companies received \$34.1 billion or 67.7 percent of the volume of all awards.

The following table shows that the first five companies received 22.5 percent of the total received by all companies in fiscal year 1978, compared with 17.7 percent during fiscal year 1977. The largest company in fiscal year 1978 received awards totalling \$4.2 billion compared with \$2.6 billion for the largest company in fiscal year 1977. To get on the list in fiscal year 1978 required \$61 million in awards, as opposed to \$62 million in fiscal year 1977.

<u>Companies</u>	<u>PERCENT OF TOTAL</u>			
	<u>FY 1975</u>	<u>FY 1976</u>	<u>FY 1977</u>	<u>FY 1978</u>
1st	5.1%	5.9%	5.1%	7.0%
2nd	3.8	3.6	3.3	4.8
3rd	3.4	3.5	3.2	4.0
4th	3.4	3.2	3.1	3.7
5th	3.3	2.9	3.0	3.0
1-5	19.0%	19.1%	17.7%	22.5%
6-10	13.1%	12.3%	12.7%	11.9%
11-25	14.8	17.0	16.9	14.3
1-25	46.9%	48.4%	47.3%	48.7%
26-50	10.8%	11.7%	11.6%	11.1%
51-75	5.5	5.5	5.3	5.4
76-100	3.1	3.4	3.5	3.3
1-100	66.3%	69.0%	67.7%	68.5%

Fourteen contractors who did not appear on the list last year are among the top 100 companies this year. Of these, one appears in position 23, one in position 45, one in position 49, and the balance between positions 56 and 100.

COMPANIES LISTED IN FY 1978  
BUT NOT IN FY 1977

AGIP SPA  
ATLANTIC RICHFIELD CO.  
BETHLEHEM STEEL CORP.  
CHARLES STARK DRAPER LABS., INC.  
CUBIC CORP.  
MASON & HANGER SILAS MASON CO.  
MITRE (THE) CORP.  
NATOMAS CO.  
PETROLEOS MEXICANOS  
RET SER ENGINEERING CO.  
REYNOLDS R.J. INDUSTRIES, INC.  
RICH MARC & CO.  
UNITED INDUSTRIAL CORP.  
VINNELL CORP.

COMPANIES LISTED IN FY 1977  
BUT NOT IN FY 1978<sup>(1)</sup>

A T O, INC.  
ALGERNON BLAIR, INC.  
CUTLER-HAMMER, INC.  
GENERAL FOODS CORP.  
KAISER INDUSTRIES CORP.  
MI RYUNG CONSTRUCTION CO. LTD.  
MORRISON KNUDSEN USS & F&M JV  
MORRISON KNUDSEN CO., INC.  
PETERSON BUILDERS, INC.  
PROCTOR & GAMBLE CO.  
SAUDI TARMAC LTD. TARMAC OS LTD.  
TACOMA BOATBUILDING CO., INC.  
TEXACO, INC.  
YOU ONE CONSTRUCTION CO. LTD.

Of the 86 companies appearing on the list in both fiscal year 1977 and 1978, 36 advanced their position, 43 are in a lower position, and 6 showed no change. Companies are considered as appearing on the list in both years despite mergers, acquisitions, divestitures, and name changes if a major component of a newly constituted company or the newly constituted company itself made the list as a component of a company in the top 100 in the prior year.

Although the contract work of many companies on the list include more than one procurement category, each company has been assigned in the following table to the procurement category that accounts for its largest dollar volume of defense awards; for example, International Telephone and Telegraph Corporation is a multi-industry company producing electronic and communications equipment and industrial and consumer products. For this table, it is assigned to "Electronics," the procurement category accounting for its largest dollar volume of DoD contract awards. On this basis, companies producing "Services" increased by six, while companies performing construction work decreased by five, and ship contractors decreased by four.

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(1) Excludes Automation Industries, which is now a subsidiary of General Cable Corporation.

NUMBER OF COMPANIES

<u>Procurement Category</u>	<u>FY 1978</u>	<u>FY 1977</u>	<u>CHANGE</u>
Aircraft	15	15	--
Missiles	13	12	+1
Ships	6	10	-4
Tank Automotive	5	6	-1
Ammunition	11	10	+1
Electronics	17	18	-1
Services	12	6	+6
Construction	1	5	-5
Petroleum	18	15	+3
Weapons	1	1	--
Subsistence	--	1	-1
All Other	1	1	--

During fiscal year 1978, ten companies received prime contract awards of \$1 billion or more. The ten companies and a brief description of their work are as follows:

<u>RANK</u>		<u>COMPANY NAME</u>	<u>AWARDS</u> (Millions)	
<u>1978</u>	<u>1977</u>		<u>1978</u>	<u>1977</u>
1	8	General Dynamics Corporation	4.2	1.4
2	1	McDonnell Douglas Corporation	2.9	2.6
3	3	United Technologies Corporation	2.4	1.6
4	2	Lockheed Corporation	2.2	1.7
5	5	General Electric	1.8	1.5
6	16	Litton Industries, Inc.	1.6	.6
7	4	Boeing Co.	1.5	1.6
8	9	Hughes Aircraft Co.	1.5	1.1
9	11	Raytheon Co.	1.3	1.0
10	7	Grumman Corporation	1.2	1.4

General Dynamics Corporation, with over a 200 percent increase in awards, is ranked first this year after an eighth-place ranking in 1977. Its 1978 percentage share was 7.0 compared to 2.7 last year. Major contracts were for the F-16 Condor fighter aircraft, nuclear submarines, and R&D for the Tomahawk missile system.

McDonnell Douglas Corporation, after two years in first place, moved to second place during fiscal year 1978 with awards of \$2.9 billion and 4.8 percent of the total. Major contracts continue to be for the F-18 prototype and F-15 Eagle aircraft and the AGM-84 Harpoon missile.

United Technologies Corporation remained in third place even though their awards increased by \$815 million or 51 percent during fiscal year 1978. Major defense contracts were for the F-100, TF-30, and TF-33 aircraft engines and the UTTAS-60 helicopter.

Lockheed Corporation dropped to fourth place after two years in the number two spot even with increased awards of 33 percent over last year. The majority of awards during fiscal year 1978 were for the TRIDENT missile system and the S-3 VIKING, P-3 ORION, and C-130 HERCULES aircraft.

General Electric Company remained in fifth place with increased awards of 18 percent (\$266 million), while its share of the total remained constant at about 3 percent. Major awards were for turbojet and turbofan engines, TRIDENT and MINUTEMAN missiles, and R&D for the F-18 HORNET and B-1 aircraft.

Litton Industries, Inc., in sixteenth place during fiscal year 1977, moved into sixth place with increased awards of 156 percent over last year with 2.6 percent of total (1.2 percent last year). Nuclear submarines, amphibious assault ships, and the DDG-47 AEGIS and DD-963 class destroyers were the major work of this company. Miscellaneous electronics and communication equipment also accounted for a large portion of the awards.

Boeing Company, in fourth place in fiscal year 1977, with a decrease of \$56 million in awards dropped to seventh place this year. The largest contracts were for the Air Warning and Control System (AWACS), MINUTEMAN missile, hydrofoil patrol ships, E-3 Special Electronic Installation aircraft, and R&D for the space shuttle.

Hughes Aircraft Company moved from ninth to eighth place with awards of \$1.5 billion or 2.5 percent of the total compared with \$1.1 billion and 2.2 percent during fiscal year 1977. Guided missile control system for the F-14 TOMCAT, the TOW, TRIDENT, PHOENIX, and MAVERICK missiles, space vehicles, and R&D for ROLAND missile system made up the major awards during fiscal year 1978.

Raytheon Company, in eleventh place last year, moved to ninth position this year as the value of contract awards rose by \$266 million. The company awards were predominately for the PATRIOT, DRAGON, and TRIDENT missile systems.

Grumman Corporation ranks in tenth place as compared to seventh in fiscal year 1977, as their share of awards dropped from 2.8 percent to 2.0 percent. Work on the E-2 HAWKEYE, A-6 INTRUDER, and EA-6B PROWLER aircraft as well as R&D for the F-111 TFX aircraft accounted for a large portion of the company awards.

5/6

INDEX OF 100 COMPANIES WHICH WITH THEIR SUBSIDIARIES RECEIVED THE  
LARGEST DOLLAR VOLUME OF MILITARY PRIME CONTRACT AWARDS IN FISCAL YEAR 1978

RANK	PARENT COMPANY	RANK	PARENT COMPANY
66.	AEROSPACE CORP. (N)	37.	INTERNATIONAL TELEPHONE & TEL CORP.
56.	AGIP SPA	60.	JOHNS HOPKINS UNIVERSITY (N)
32.	AMERADA HESS CORP.	28.	L T V CORP.
39.	AMERICAN MOTORS CORP.	77.	LEAR STEGLER, INC.
21.	AMERICAN TELEPHONE & TELEGRAPH CO.	6.	LITTON INDUSTRIES, INC.
89.	ATLANTIC RICHFIELD CO.	4.	LOCKHEED CORP.
64.	AVCO CORP.	91.	LORAL CORP.
78.	BEECH AIRCRAFT CORP.	19.	MARTIN MARIETTA CORP.
40.	BENDIX CORP.	90.	MASON & HANGER SILAS MASON CO.
86.	BETHLEHEM STEEL CORP.	69.	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
7.	BOEING CO.	2.	MCDONNELL DOUGLAS CORP.
42.	BRITISH PETROLEUM CO. LTD.	93.	MITRE (THE) CORP. (N)
96.	BURROUGHS CORP.	48.	MOBIL CORP.
61.	CHAMBERLAIN MFG. CORP.	65.	MOTOROLA, INC.
81.	CHARLES STARK DRAPER LABS., INC.	99.	NATOMAS CO.
13.	CHRYSLER CORP.	84.	NORRIS INDUSTRIES
53.	COASTAL CORP. 1/	57.	NORTH AMERICAN PHILIPS CORP.
88.	COMPUTER SCIENCES CORP.	15.	NORTHROP CORP.
34.	CONGOLEUM CORP.	50.	OGDEN CORP.
71.	CONTROL DATA CORP.	79.	PACIFIC RESOURCES, INC.
98.	CUBIC CORP.	73.	PAN AMERICAN WORLD AIRWAYS, INC.
97.	DAY & ZIMMERMAN, INC.	45.	PETROLEOS MEXICANOS
82.	DUPONT E I DE NEMOURS & CO.	16.	R C A CORP.
58.	E SYSTEMS, INC.	9.	RAYTHEON CO.
72.	EASTMAN KODAK CO.	49.	RET SER ENGINEERING CO.
68.	EMERSON ELECTRIC CO.	23.	REYNOLDS R.J. INDUSTRIES, INC.
43.	ENGELHARD MINERALS & CHEMICALS CORP.	94.	RICH, MARC & CO.
33.	EXXON CORP.	11.	ROCKWELL INTERNATIONAL CORP.
30.	F M C CORP.	47.	ROYAL DUTCH SHELL GROUP
20.	FAIRCHILD INDUSTRIES, INC.	67.	SANDERS ASSOCIATES, INC.
26.	FORD MOTOR CO.	52.	SIGNAL COMPANIES INC. (THE)
63.	GENERAL CABLE CORP.	35.	SINGER CO.
1.	GENERAL DYNAMICS CORP.	14.	SPERRY RAND CORP.
5.	GENERAL ELECTRIC CO	38.	STANDARD OIL CO. OF CALIFORNIA
24.	GENERAL MOTORS CORP.	76.	STANDARD OIL OF INDIANA
46.	GENERAL TELEPHONE & ELECTRONICS CORP.	62.	SUN CO., INC.
41.	GENERAL TIRE & RUBBER CO.	83.	SVERDRUP & PARCEL & ASSOCIATES, INC.
51.	GOODYEAR TIRE & RUBBER CO.	31.	T R W, INC.
55.	GOULD, INC.	36.	TELEDYNE, INC.
10.	GRUMMAN CORP.	25.	TENNECO, INC.
59.	GUAM OIL & REFINING CO., INC.	22.	TEXAS INSTRUMENTS, INC.
87.	GULF OIL CORP.	12.	TEXTRON, INC.
74.	HARRIS CORP.	70.	THIOKOL CORP.
44.	HARSCO CORP.	29.	TODD SHIPYARDS CORP.
54.	HERCULES, INC.	85.	TRANSAMERICA CORP.
92.	HEWLETT PACKARD CO.	80.	U.S. & SOUTH AMERICAN ENTERPRISES
17.	HONEYWELL, INC.	100.	UNITED INDUSTRIAL CORP.
8.	HUGHES AIRCRAFT CO.	3.	UNITED TECHNOLOGIES CORP.
27.	INTERNATIONAL BUSINESS MACHINES CO.	75.	VINNELL CORP.
95.	INTERNATIONAL HARVESTER CO.	18.	WESTINGHOUSE ELECTRIC CORP.

1/ Formerly, Coastal States Gas Corporation.

7/8

100 COMPANIES AND THEIR SUBSIDIARIES LISTED ACCORDING TO  
NET VALUE OF MILITARY PRIME CONTRACT AWARDS

FISCAL YEAR 1978  
( 1 OCT 1977 - 30 SEP 1978 )

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
	U. S. TOTAL	\$59,581,864 =====	100.00	100.00
	TOTAL, 100 COMPANIES + THEIR SUBSIDIARIES	40,822,366 =====	68.51	68.51
1.	GENERAL DYNAMICS CORP CATAGRAFX GMH GENERAL DYNAMICS COMMUNICATIONS CO STRICMBERG CATAGRAFX, INC	4,142,816 84 4,995 5,652 =====		
	TOTAL	4,153,547	6.97	6.97
2.	MCDONNELL DOUGLAS CORP	2,863,294	4.81	11.78
3.	UNITED TECHNOLOGIES CORP AMBAC INDUSTRIES INC ESSEX INTERNATIONAL, INC CTIS ELEVATOR CO FRATT + WHITNEY AIRCRAFT CO AND TERMINAL COMMUNICATIONS, INC	2,384,173 14,288 98 650 559 21 =====		
	TOTAL	2,399,789	4.03	15.81
4.	LOCKHEED CORP LOCKHEED ELECTRONICS CO, INC LOCKHEED MISSILES + SPACE CO INC LOCKHEED SHIPBUILDING CONSTRUCTION MURDOCK MACHINE + ENGR CO OF TEXAS	700,438 52,196 1,183,846 289,549 402 =====		
	TOTAL	2,226,431	3.74	19.55
5.	GENERAL ELECTRIC CO GENERAL ELECTRIC MEDICAL SYSTEMS INTERMAGNETICS GENERAL CORP MANAGEMENT + TECHNICAL SERVICES CO	1,782,684 32 384 3,348 =====		
	TOTAL	1,786,448	3.00	22.55
6.	LITTON INDUSTRIES, INC DIEHL DATA SYSTEMS KOEMLER CAYTON INC LITTON BIOMETRICS INC LITTON BUSINESS SYSTEMS, INC LITTON EDUCATIONAL PUB CO, INC LITTON INDUSTRIAL PRODUCTS INC LITTON MEDICAL PRODUCTS, INC LITTON PRECISION PRODUCTS INTL INC LITTON SYSTEMS INC MONROE BUSINESS EQUIPMENT CO INC PCARCE CALCULATING CO MONROE INTERNATIONAL INC WESTERN GEOPHYSICAL CO OF AMERICA	48,076 30 20 521 713 175 1,000 63 292 1,505,746 12 362 42 82 =====		
	TOTAL	1,557,134	2.61	25.16

RANK	COMPANIES	THOUSANDS OF CARRIERS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
7.	BOEING CO BOEING AEROSPACE CO BOEING COMPUTER SERVICES INC BOEING INTL CORP BOEING SERVICES INTERNATIONAL INC BOEING VERTOL CO	1,301,356 148 5,725 3,524 52,184 161,517		
	TOTAL	1,524,454	2.56	27.72
8.	HUGHES AIRCRAFT CO HUGHES RESEARCH LABS. SANTA BARBARA RESEARCH CENTER SLMPA CORP	1,297,632 1,123 45,430 144,373		
	TOTAL	1,488,558	2.50	30.22
9.	RAYTHEON CO ICWA MFG CO OF CEDAR RAPIDS ICWA LEXITRON CORP LCRAC SERVICE CCRF MACLETT LABORATORIES INC RAYTHEON EDUCATIONAL SYSTEMS CO RAYTHEON GULF SYSTEMS CO RAYTHEON SERVICE CO RAYTHEON TECHNICAL ASSISTANCE CO UNITED ENGINEERS + CONSTRUCTORS	1,205,856 24 578 68 1,252 78,176 2,918 15,626 989 1,266		
	TOTAL	1,306,763	2.19	32.41
10.	GRUMMAN CORP GRUMMAN AEROSPACE CORP GRUMMAN DATA SYSTEMS CORP GRUMMAN ENERGY SYSTEMS INC	1,175,218 4,791 23		
	TOTAL	1,180,032	1.96	34.39
11.	ROCKWELL INTERNATIONAL CORP HEIP UNIVERSAL CCRF	890,177 27		
	TOTAL	890,204	1.49	35.88
12.	TEXTRON INC BELL HELICOPTER INTL INC E-Z GO CAR CORP JACOBSEN MFG CO	463,475 403,929 16 57		
	TOTAL	867,517	1.46	37.34
13.	CHRYSLER CORP	742,489	1.25	38.59
14.	SPERRY RAND CORP SPERRY ELECTRO COMPONENTS SPERRY FLIGHT SYSTEMS SPERRY MARINE SYSTEMS SPERRY MICROWAVE COMPONENTS	605,834 323 5,726 125 12		
	TOTAL	612,020	1.03	39.62
15.	NORTHROP CORP ALABAMA INDUSTRIES, INC NORTHROP WORLDWIDE ACFT SVCS INC PAGE COMMUNICATIONS ENGINEERS INC	520,266 660 65,053 30		
	TOTAL	586,049	0.98	40.60

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
16.	R C A CCRF BANQUET FCCCS CCRF HERTZ CORP HERTZ EQUIPMENT RENTAL CORP MACISON FURNITURE INDUSTRIES R C A ALASKA COMMUNICATIONS INC R C A GLOBAL COMMUNICATIONS, INC R C A MOBILE COMMUNICATIONS SHELBY WILLIAMS INDUSTRIES, INC	535,675 18 18 13 316 14,679 13,696 24 775		
	TOTAL	565,214	0.95	41.55
17.	HONEYWELL INC HONEYWELL INFORMATION SYSTEMS, INC SKINNER PRECISION INDUSTRIES INC SPECTRONICS INC	459,973 82,568 51 2,111		
	TOTAL	544,703	0.91	42.46
18.	WESTINGHOUSE ELECTRIC CORP THERM KING CORP WEGCO CORP WESTINGHOUSE ELECTRIC SUPPLY CO WESTINGHOUSE LEARNING CCRF	537,397 13 83 1,557 137		
	TOTAL	539,187	0.90	43.36
19.	MARTIN MARIETTA CORP MARTIN MARIETTA AGGREGATES MARTIN MARIETTA ALUMINUM INC MARTIN MARIETTA ALUMINUM SALES INC MARTIN MARIETTA DATA SYSTEMS INC	461,466 22 2,237 74,756 700		
	TOTAL	539,181	0.90	44.26
20.	FAIRCHILD INDUSTRIES, INC AMERICAN SATELLITE CORP	507,117 749		
	TOTAL	507,866	0.85	45.11
21.	AMERICAN TELEPHONE + TELEGRAPH CO CHESAPEAKE + POTOMAC TEL CO CF CO ILLINOIS BELL TEL CO INDIANA BELL TEL CO, INC MICHIGAN BELL TEL CO MOUNTAIN BELL TELEPHONE CO NEW ENGLAND TEL + TEL CO NEW JERSEY BELL TELEPHONE CO NEW YORK TELEPHONE CO NORTHWESTERN BELL TELEPHONE CO CHICAGO BELL TELEPHONE CO PACIFIC NORTHWEST BELL TELEPHONE PACIFIC TELEPHONE + TELEGRAPH CO SOUTHERN BELL TELEPHONE + TELEGRAPH SOUTHWESTERN BELL TELEPHONE TELETYPE CORP WESTERN ELECTRIC CO INC	253,776 36,160 360 150 442 4,318 1,795 650 755 821 930 326 3,534 1,892 3,863 4,237 11,134 131,491		
	TOTAL	456,634	0.77	45.88
22.	TEXAS INSTRUMENTS INC	434,408	0.73	46.61

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
23.	REYNOLDS (RJ) INDUSTRIES, INC RJR FOCES, INC SEA-LANE SERVICE, INC UNITED STATES LINES INC	28,033 2,350 222,337 168,722 -----		
	TOTAL	421,442	0.71	47.32
24.	GENERAL MOTORS CCRF	419,530	0.70	48.02
25.	TENNECO INC CASE (JI) CO CASE POWER + EQUIPMENT LTD GAS EQUIPMENT ENGRS, INC NEWPORT NEWS SHIPFELD + CRY ECCR CO TENNECO CHEMICALS, INC	26,059 72 145 380,583 72 -----		
	TOTAL	406,971	0.68	48.70
26.	FOUR MOTOR CO FOUR AEROSPACE + COMMUNICATIONS	3,375 402,854 -----		
	TOTAL	406,229	0.68	49.38
27.	INTERNATIONAL BUSINESS MACHINES CO IBM DEUTSCHLAND GMBH	395,960 483 -----		
	TOTAL	396,443	0.67	50.05
28.	LTV CCRF ADVANCED TECHNOLOGY CENTER, INC JONES + LAUGHLIN STEEL CORP KENTRON HAWAII LTD VCUGHT CORP WILSON + CO INC	1,463 103 179 27,872 337,420 17,402 -----		
	TOTAL	384,439	0.65	50.70
29.	TOE SHIPYARDS CCRF DESIGNERS + PLANNERS, INC	377,137 1,887 -----		
	TOTAL	379,024	0.64	51.34
30.	FPC CCRF	360,405	0.60	51.94
31.	T R W INC AERTECH INDUSTRIES GE LEWIS CATHER + CO RAMSEY CCRF T R W COLORADO ELECTRONICS, INC	292,117 536 127 46 32,597 -----		
	TOTAL	325,423	0.55	52.49
32.	AMERADA HESS CCRP HESS OIL VIRGIN ISLANDS CCRP	39,548 285,247 -----		
	TOTAL	325,195	0.55	53.04
33.	EXXON CCRF ESSC A G ESSC ITALIANA S F A ESSC STANDARD OIL CO S A EXXON RESEARCH + ENGINEERING CC	282,926 27,013 494 349 77		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL
33.	EXXON CORP		
	TOTAL	310,859	0.52
34.	COAL OLEUM CORP BATH IRON WORKS CCRP	282,275	
	TOTAL	282,275	0.47
35.	SINGER CO H R B SINGER, INC LAYNE ATLANTIC CO SINGER COMPUTER CMBH SOCIETY FOR VISUAL EDUCATION, INC	255,658 16,014 16 13 43	
	TOTAL	281,744	0.47
36.	TELEDYNE INC	30,610	
	PICFONETICS INC	110	
	TELEDYNE BATTERY PRODUCTS	8,015	
	TELEDYNE BROWN ENGINEERING	12,555	
	TELEDYNE C A E	32,113	
	TELEDYNE CAMERA SYSTEMS	1,867	
	TELEDYNE CONTROLS	1,235	
	TELEDYNE CRYSTALCNICS	59	
	TELEDYNE ELECTRICALS	14,844	
	TELEDYNE FIRTH STERLING INC	10,249	
	TELEDYNE GEOTECH	100	
	TELEDYNE HASTINGS RAYDIST	1,010	
	TELEDYNE HYDRA POWER	2,514	
	TELEDYNE INDUSTRIES, INC	145,529	
	TELEDYNE ISOTOPES	2,382	
	TELEDYNE M E C	4,751	
	TELEDYNE MCCORMICK SELFM	713	
	TELEDYNE MCKAY	410	
	TELEDYNE NEOSHO	830	
	TELEDYNE OSTER	108	
	TELEDYNE PHILERICK	13	
	TELEDYNE FINES	52	
	TELEDYNE PCST	25	
	TELEDYNE POWER ALLOYS	17	
	TELEDYNE REPUBLIC MFG	549	
	TELEDYNE SEMICONDUCTOR	134	
	TELEDYNE SPRAGUE ENGINEERING	277	
	TELEDYNE THERMATICS	784	
	TELEDYNE WAH CHANG	117	
	TELEDYNE WALTERBROS	26	
	TELEDYNE WISCONSIN MOTOR	383	
	TOTAL	272,281	0.46
37.	INTERNATIONAL TELEPHONE + TEL CCRP	127,446	
	FEDERAL ELECTRIC CCRP	44,068	
	I T T ARTIC SERVICES, INC	44,740	
	I T T EARTON	735	
	I T T BLACKBURN CCRP	11	
	I T T CONTINENTAL BAKING CO	2,222	
	I T T COURIER SYSTEMS INC	28	
	I T T GECCA MARINE, INC	14	
	I T T ELECTRO PHYSICS LABORATORIES	38	
	I T T GENERAL CONTROLS, INC	416	
	I T T GILFILLAN INC	33,808	
	I T T GRIMMELL CCRP	52	
	I T T GWALTNEY INC	3,460	
	I T T HARPER, INC	275	

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
37.	INTERNATIONAL TELEPHONE + TEL CORP			
	ITT HENZE SERVICE	103		
	ITT JENNINGS	348		
	ITT MACKAY MARINE	43		
	ITT NORTH ELECTRIC CO	131		
	ITT FCMCNA ELECTRONICS INC	14		
	ITT SEMICONDUCTORS, INC	32		
	ITT TELECOMMUNICATIONS	249		
	ITT THOMSON INDUSTRIES, INC	21		
	ITT WORLD COMMUNICATIONS, INC	9,515		
	J C C PUMP CO INC	538		
	STANDARD ELEKTRIK LORENZ AG	12		
	TOTAL	268,721	0.45	55.41
38.	STANDARD OIL CO OF CALIF	5,061		
	CALTEX ASIA LTD	170	a/	
	CALTEX OIL PRODUCTS CO	27,028	a/	
	CALTEX OVERSEAS LTD	446	a/	
	CALTEX PHILIPPINES INC	26	a/	
	CHEVRON ASPHALT CO	52		
	CHEVRON CHEMICAL CO	140		
	CHEVRON INTERNATIONAL OIL CO, INC	504		
	CHEVRON OIL CO	3,462		
	CHEVRON U S A INC	207,037		
	TOTAL	243,866	0.41	55.82
39.	AMERICAN MOTORS CORP			
	A M GENERAL CORP	222,166		
	MERCURY PLASTICS CO	436		
	TOTAL	222,602	0.37	56.19
40.	BENDIX CORP	211,124		
	BENDIX AUTOLITE CORP	1,027		
	BENDIX FIELD ENGINEERING CORP	7,871		
	SKAGIT CORP	26		
	TOTAL	220,048	0.37	56.56
41.	GENERAL TIRE + RUBBER CO			
	AEROCHEM GENERAL CORP	<u>213,341</u>		
	TOTAL	<u>213,341</u>	0.36	56.92
42.	BRITISH PETROLEUM CO LTD	23		
	BP AUSTRALIA LTD	1,442		
	BP NORTH AMERICA LTD	8,134		
	BP OIL CORP	114		
	BP TRADING LTD	201,341		
	TOTAL	211,054	0.35	57.27
43.	ENGELHARD MINERALS + CHEMICALS CORP	461		
	CEREX + CO INC	209,053		
	SKYLINE INDUSTRIES INC	835		
	TOTAL	210,369	0.35	57.62
44.	MARSCO CORP	206,320	0.35	57.97

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
45.	PETROLEOS MEXICANOS	199,785	0.34	58.31
46.	GENERAL TELEPHONE + ELECTRONS CCFP	86		
	GTE AUTOMATIC ELECTRIC INC	1,443		
	GTE INFORMATION SYSTEMS, INC	1,150		
	GTE LABORATORIES, INC	194		
	GTE LENKURT, INC	1,692		
	GTE SYLVANIA INC	179,455		
	GTE TELECOMUNICACIONES SPA	164		
	GENERAL TELEPHONE CO OF FLORIDA	422		
	GENERAL TELEPHONE CO OF SOUTHEAST	728		
	GENERAL TELEPHONE CO OF SOUTHWEST	287		
	HA威IAN TELEPHONE CO	8,740		
	WESTERN GOLD + PLATINUM CO	75		
	TOTAL	194,516	0.33	58.64
47.	ROYAL DUTCH SHELL GROUP			
	SHELL CHEMICAL INC	133		
	SHELL CO OF THE ISLAND	561		
	SHELL CURACAO N V	50,741		
	SHELL EASTERN PETROLEUM PTE LTD	55,425		
	SHELL FRANCAISE	25,017		
	SHELL INTERNATIONAL	8,727		
	SHELL NEDERLAND	50		
	SHELL OIL CO	30,023		
	TOTAL	170,677	0.29	58.93
48.	MOEIL CORP			
	CONTAINER CORP OF AMERICA	108		
	HYDRO CIRCUIT CCRF	31		
	MCBIL OIL CORP	168,242		
	MOEIL OIL PHILIPPINES, INC	27		
	MCBIL RESEARCH + DEV CCFP	63		
	TOTAL	168,471	0.28	59.21
49.	RET SEA ENGINEERING CO	167,751	0.28	59.49
50.	OGDEN CORP			
	AVONDALE SHIPYARDS INC	159,772		
	BETTER BUILT MACHINERY CORP	72		
	LUCKMAN (CHARLES) ASSOCIATES	12		
	SMS INSTRUMENTS, INC	2,082		
	TILLIE LEWIS FOCS INC	1,834		
	WILSON FOCS INC	3,919		
	TOTAL	166,651	0.28	59.77
51.	GOODYEAR TIRE + RUBBER CO	54,838		
	GOODYEAR AEROSPACE CORP	106,621		
	MOTOR WHEEL CCRF	3,901		
	TOTAL	164,560	0.28	60.05
52.	SIGNAL COMPANIES INC (THE)			
	AIRESEARCH MFG CO	139		
	AIRESEARCH MFG CO OF ARIZONA	14,885		
	AIRESEARCH MFG CO OF CALIFORNIA	17,970		
	DUNHAM BUSH INC	614		
	GARRETT CCRF	111,648		

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
52.	SIGNAL COMPANIES INC (THE) MACK TRUCKS INC SOUTHLAND CIL CORP	2,146 8,125		
	TOTAL	155,527	0.26	60.31
53.	COASTAL CORP BELCHER OIL CO BELCHER OIL CO OF CAPE CANAVERAL BELCHER TERMINALS INC COASTAL STATES ENERGY CO COASTAL STATES MARKETING INC COASTAL STATES TRADING INC GLENN FETROLEUM CCP LC - VACA GATHERING CO UNION FETROLEUM CCP	12,860 3,237 508 844 77,133 41,865 262 6,330 11,305		
	TOTAL	154,374	0.26	60.57
54.	HERCULES, INC HAVEG INDUSTRIES INC	153,015 437		
	TOTAL	153,452	0.26	60.83
55.	GOLLE, INC CHESAPEAKE INSTRUMENT CORP	158,352 427		
	TOTAL	150,779	0.25	61.08
56.	AGIP SFA	148,653	0.25	61.33
57.	NORTH AMERICAN PHILIPS CORP AMPEREX ELECTRONIC CORP BANCOR BALSH CO INC CHICAGO MAGNETIC WIRE CO ECAY INTERNATIONAL INC GENERAL ATRONICS CORP MAGRAVCX CO MAGRAVCX GCVT + INDUSTRIAL ELEC CO NORTH AMERICAN PHILIPS CONTROLS CO NORTH AMERICAN PHILIPS LTG CORP CHMITE MFG CO PHILIPS BUSINESS SYSTEMS INC PHILIPS ELECTRICAL INSTRUMENTS INC PHILIPS MEDICAL SYSTEMS INC PHILIPS RXANE LABORATORIES INC SMITH HERMAN H INC THOMPSON HARDWARE CHEMICAL CO	1,263 1,781 124 688 42 560 71,767 67,329 1,367 83 17 16 71 1,634 13 338 80		
	TOTAL	147,263	0.25	61.58
58.	E SYSTEMS, INC ELECTRONIC COMMUNICATIONS INC SERV AIR INC	131,682 4,050 6,560		
	TOTAL	142,312	0.24	61.82
59.	GULF CIL + REFINING CO INC	148,132	0.24	62.06

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
60.	JOHNS HOPKINS UNIVERSITY (N)	134,853	0.23	62.29
61.	CHAMBERLAIN MFG CORP	130,247	0.22	62.51
62.	SUN CO INC SUN OIL TRADING CO SLN SHIPBUILDING + DRY DOCK CO	76,349 37,533 15,872 ----- 129,754	0.22	62.73
	TOTAL			
63.	GENERAL CAELE CORP AERC MECHANISM INC AUTOMATION INDUSTRIES INC G & H TECHNOLOGY INC SPRAGUE ELECTRIC CO	3,562 69 124,434 229 641 ----- 128,935	0.22	62.95
	TOTAL			
64.	AVCC CORP AVCC EMBASSY PICTURES CORP AVCC EVERETT RESEARCH LABORATORY	104,671 24 19,451 ----- 124,146	0.21	63.16
	TOTAL			
65.	MOTOROLA INC MOTOROLA OVERSEAS CORP	123,231 144 ----- 123,375	0.21	63.37
	TOTAL			
66.	AEROSPACE CORP (N)	114,020	0.19	63.56
67.	SANDERS ASSOCIATES INC	113,340	0.19	63.75
68.	EMERSON ELECTRIC CO CHANCE A B CO RIDGE TOOL CO RCSENCINT INC	107,360 128 14 4,431 ----- 111,933	0.19	63.94
	TOTAL			
69.	MASSACHUSETTS INSTITUTE TECHNOLOGY	111,706	0.19	64.13
70.	THICKOL CORP	111,543	0.19	64.32
71.	CONTROL DATA CORP CCMPA CORP SERVICE BUREAU CORP THE	110,816 75 22 ----- 110,913	0.19	64.51
	TOTAL			
72.	EASTMAN KODAK CO EASTMAN KODAK STORES INC KODAK EXPORT, LTD	107,767 80 29 ----- 107,876	0.18	64.69
	TOTAL			

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
73.	FAN AMERICAN WORLD AIRWAYS INC	105,658	0.18	64.87
74.	HARRIS CORP	105,131	0.18	65.05
75.	VINNELL CORP	103,726	0.17	65.22
76.	STANDARD OIL OF INDIANA APCOO OIL CO MICHIGAN OIL CORP	102,051 16		
	TOTAL	102,067	0.17	65.39
77.	LEAR SIEGLER INC	100,643	0.17	65.56
78.	BEECH AIRCRAFT CORP CENVER BEECHCRAFT, INC	98,267 38		
	TOTAL	98,305	0.16	65.72
79.	PACIFIC RESOURCES INC GASCO INC HAWAIIAN INDEPENDENT REFINERY INC	669 95,725 -----		
	TOTAL	96,394	0.16	65.88
80.	U S & SOUTH AMERICAN ENTERPRISES	94,882	0.16	66.04
81.	CHARLES STARK DRAPER LABS INC	93,062	0.16	66.20
82.	CUFCNT E I DE NEMCLRS + CO ENDC LABORATORIES, INC REMINGTON ARMS CO, INC	9,369 431 79,161 -----		
	TOTAL	89,011	0.15	66.35
83.	SVERDRUP + PARCEL + ASSOC INC ARC INC	6,660 81,338 -----		
	TOTAL	87,998	0.15	66.50
84.	NORRIS INDUSTRIES CONNELL BROS CO LTD	84,428 1,561 -----		
	TOTAL	85,989	0.14	66.64
85.	TRANSAMERICA CORP BUDGET RENT A CAR CORP OF AMERICA GE LAVAL TURBINE, INC SYNERGRAPHICS, INC TRANS INTL AIRLINES INC	15 14,860 10 70,863 -----		
	TOTAL	85,748	0.14	66.78

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
86.	BETHLEHEM STEEL CORP	85,596	0.14	66.92
87.	GULF OIL CORP GULF OIL TRADING CO GULF PETROLEUM SA PANAMA GULF RESEARCH + DEVELOPMENT CO KOREA OIL CORP	35,854 4,134 368 15 39,313 ----- TOTAL	0.13 0.13 0.13 0.13 0.13 0.13 79,724	67.05
88.	CCMFLTER SCIENCES CORP	78,571	0.13	67.18
89.	ATLANTIC RICHFIELD CO WRIGHT OIL CO INC	75,423 99 ----- TOTAL	0.13 0.13 0.13 75,522	67.31
90.	MASCH + HANGER SILAS MASCH CO	74,318	0.12	67.43
91.	LORAL CORP CCNIC CORP	68,855 2,376 ----- TOTAL	0.12 0.12 0.12 71,231	67.55
92.	HEWLETT PACKARD CO CATAMEC CORP	70,529 43 ----- TOTAL	0.12 0.12 0.12 70,572	67.67
93.	MITRE (THE) CORP (N)	69,962	0.12	67.79
94.	RICH MARC + CO	69,193	0.12	67.91
95.	INTERNATIONAL HARVESTER CO MACLEOD + CO	64,213 2,352 ----- TOTAL	0.11 0.11 0.11 66,565	68.02
96.	BUERGELHS CORP	65,314	0.11	68.13
97.	DAY + ZIMMERMAN INC	65,066	0.11	68.24
98.	CUEIC CORP CLBIC WESTERN DATA FARSONS MEDICAL GAS CO SOUTHEASTERN ELEVATOR CORP UNITED STATES ELEVATOR CORP US WESTERN ELEVATOR CORP	60,520 1,263 71 21 66 278 ----- TOTAL	0.10 0.10 0.10 0.10 0.10 0.10 62,179	68.34

RANK	COMPANIES	THOUSANDS OF DOLLARS	PERCENT OF U.S. TOTAL	CUMULATIVE PERCENT OF U.S. TOTAL
99.	NATCMAS COMPANY AMERICAN PRESIDENT LINES, LTD WEST INDIES OIL CO LTD	60,531 468 -----		
	TOTAL	60,999	0.10	68.44
100.	UNITED INDUSTRIAL CCP A A I CORP AFFILIATED HOSPITAL PRODUCTS, INC CETFOIT STOKER CO M P L INC	58,429 1,957 76 75 -----		
	TOTAL	60,577	0.10	68.54

a/ Stock ownership is equally divided between Standard Oil Company of California and Texaco, Inc.